Last Updated: December 2002

Ciba Geigy - Hercules Plant Site

EPA Identification Number: NYD002069748

Other (Former) Names of Site

None

Site Facts

The approximately 45-acre Main Plant site is located in the Town of Queensbury, just east of the City of Glens Falls in Warren County, New York. The site is in a mixed industrial/residential area on the northern bank of an easterly flowing segment of the Hudson River.

Manufacturing activities began in 1901 and initially involved the manufacture of wallpaper and later, inorganic pigments. Hercules Inc. purchased the site in 1960 and sold it to Ciba-Geigy in 1979. Ciba-Geigy stopped producing pigments in 1989 and demolished the buildings. Stained or potentially contaminated debris was transported off-site for disposal as hazardous waste. Hercules and Ciba have entered into a cooperative agreement whereby Hercules is managing the corrective measures while Ciba retains ownership of the site.

Site Responsibility and Legal Instrument

Corrective action is being implemented through a 6 NYCRR Part 373 post-closure permit and its subsequent major modifications.

Potential Threats and Contaminants

Contaminants
The soil, groundwater and sediments at the site have been contaminated with heavy metals, cyanide and volatile organic compounds (VOCs) from several sources that included:

- underground sewers that leaked wastewater containing heavy metals and cyanide;
- underground tank systems that leaked VOCs;
- releases of heavy metals from the surface impoundment;
- releases of heavy metals and VOCs from waste piles; and
- releases of heavy metals from waste ore tailings.

Potential Threats From Contaminated Groundwater

Contaminated groundwater does not pose a human health threat since no known water-supply wells have been impacted by this groundwater. However, New York State considers all its groundwater to be a potential source of potable water that should be remediated to the state's groundwater quality protection standards. In addition, the groundwater may leach into adjacent surface waters and sediments. Trespassers are kept off site by fencing and security and are not expected to come in contact with contaminated groundwater. Workers sampling groundwater and handling it follow an appropriate health and safety plan.

Potential Threats From Contaminated Soil

The site is secure and trespassers should not coming in contact with the contaminated soils. Off-site, the potential for human contact with contaminated sediment or waste in the Hudson River and the ponded backwater area, has been mitigated due to the implementation of remedial measures.

Potential Threats From Air Contamination

Currently, there is a soil and vegetative cover at the Main Plant site, and a soil cover at the areas that required remediation at the pretreatment plant site. Additionally, at the Main Plant site and pretreatment plant, there is a very low potential threat from volatile contaminants since there are no occupied buildings on these sites. Historically, release of airborne dust was not a problem at the Main Plant site given the slabs, vegetative growth, and debris covering the site. In addition, monitoring for volatile compounds was required where volatiles were known or may have been expected in the soils.

Cleanup Approach and Progress

Full scale implementation of final corrective measures was accomplished in September 2002. The following corrective measures were implemented:

- Former Eastern Portion of Main Plant Site - In 1991, approximately 13,000 cubic yards of soil contaminated with heavy metals were removed from the 15-acre eastern portion of the Main Plant site as part of the final remedy prior to the sale of the property to Warren County for use as a recycling center. This soil was stockpiled at the western portion of the site. Decontamination of a warehouse, which was sold to Warren County, was addressed in the final corrective measures.

- Sewer Integrity Evaluations and Repairs - During 1991 and 1992, a series of integrity evaluations were conducted on the industrial sewer. Those sections that failed were repaired.

- Main Plant Site - Since there is no distinct boundary between the north and south waste piles, the contaminated soil/waste to the east and the north lagoon, all are undergoing closure as a CAMU (Corrective Action Management Unit). An impermeable composite cover has been placed over the five-acre north lagoon

area. A permeable soil cover has been placed over the the remainder of the site and a groundwater interception system (wells and a french drain) has been installed at the down gradient boundary of the site. This system replaces a previous interim corrective measure.

- Pretreatment Plant - A final corrective measure was implemented in 1997 that involved the excavation of contaminated surface soil from the eastern portion of the pretreatment plant. After the excavation, the remaining soils had contaminant levels below the threshhold of concern.

Off-Site:

- Hudson River - Approximately 12,000 cubic yards of waste and debris were removed from the Hudson River banks adjacent to and immediately below the site. Since most of this material contained high levels of heavy metals it was placed into the CAMU. An erosion-preventing cover was placed where waste deposits were removed and it extended to the normal high water level.

- Ponded Backwater Area - This area consists of ponds and adjacent lands located in a former river channel within the Hudson River. The final remedy consisted of the removal of approximately 15,000 cubic yards of soils contaminated with heavy metals, the placement of clean fill in most of the excavated area, and the re-vegetation of the area. All of these activities, except for re-vegetation, were completed by Fall 2001. The re-vegetation is anticipated for Spring 2003. The remedy will result in the creation of additional wetlands within the area.

- Cement Company - Over the years as a result of erosion, material from the western side of the waste piles had been washed into the Cement Company pond. During August and September of 1994, as an interim corrective measure, the adjacent stream was relocated and approximately 1900 cubic yards of this waste material was removed and placed on the north waste pile. Excavated areas were backfilled with clean clay. Silt fences were installed around the north waste pile to prevent erosion of this material. Recently, a geotextile membrane was installed and clean fill was placed on the bottom of the Cement Company pond.

- Off-Site Air Emissions Impacted Properties - Hercules completed the removal of contaminated soils at the off-site properties impacted by past air releases. In addition, removal actions have been completed at the pre-treatment plant. The off-site properties, where metals contaminated surface soils, were remediated by removing the contaminated soil and replacing it with clean fill.

Permit Status

On September 30, 1991 a 6 NYCRR Part 373 post-closure permit was issued to the facility for closure and post-closure care of the north lagoon (a surface impoundment). The

corrective action portion of this permit required the facility to investigate the impact of past operations on the property and off-site areas, including the adjacent surface waters.

The post-closure permit renewal, which became effective on January 6, 1997, addressed the requirements for the final corrective measures at the Main Plant Site and at the pre-treatment plant. The permit was modified on January 12, 1999 to incorporate the final corrective measures for the off-site properties impacted by past air releases from the site; for the off-site Glens Falls Cement Company pond; and for the contamination in the Hudson River adjacent to and immediately downstream from the site. The post-closure permit was modified again to impose corrective measures for the ponded backwater area. This major permit modification was effective as of December 6, 2000.

Site Repository

Copies of supporting technical documents and correspondence cited in this fact sheet are available for public review at:

New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials
Bureau of Radiation and Hazardous Waste Management
625 Broadway
Albany, NY 12233-7252
For appointment, please call Victor Valaitis at (518) 402-8594.